

# COSTUME REFERENCE LIBRARY

## Stormtrooper, Empire Strikes Back



Model TK-7795, Photo by Jason M Kreis TK-4625

**Description:** Stormtrooper, Empire Strikes Back

**Prefix:** TK

**Detachment:** [First Imperial Stormtrooper Detachment](#)

**Context:** Episode V: The Empire Strikes Back

The Stormtroopers are the main force during the capture and interrogation of the Rebels, Han Solo, Princess Leia Organa, Chewbacca and their droid C3PO on the Cloud City of Bespin. These highly trained elite soldiers cannot be bribed or swayed from their dedication to the Empire. The Stormtroopers are not only the first strike team units sent into critical combat situations, but are also assigned to



keep a watchful eye over the Imperial officers who might betray the Emperor's cause. Garrisons of Stormtroopers are stationed on worlds throughout the Galaxy to keep order, and stop any Rebel uprisings. Even though the Stormtroopers are an independent unit, having their own command structure, ranking system and support facilities, they still serve on Imperial vessels, and operate along side the Imperial army and navy. The Stormtroopers are shielded by hardened, plastoid, composite armor, fitted over a black environmental body glove, with a built-in life support system. The imposing white armor not only protects them from harsh environments, but also gives limited protection from blaster fire. Stormtroopers carry an array of equipment and weapons, wielding blaster rifles and pistols with great skill. The Stormtroopers, having the combined training and battle tactics of both an Army soldier and a Marine, makes them highly adaptable and a very skilled force.

The 501st approval requirements are listed in black.

FISD Defines two additional, optional levels of costuming excellence. In the page below, requirements for Level 2 "Expert Infantryman" are listed in **blue**. Requirements for Level 3 "Centurion" are listed in **red**.

- Those armor pieces without blue and/ or red text are by default considered the highest level.
- Please visit the FISD web site for a full description of these standards.

**For 501st membership only the requirements in black need to be met.**

#### Special Notes:

- Visit the [Frequently asked questions page](#) for information on the Rubies Supreme Stormtrooper costume.
- Blasters are not required for legion membership per our [weapons policy](#).
- The armor parts shall be made from one of these types of materials or like materials: White fiberglass, ABS (Acrylonitrile Butadiene Styrene), HIPS (High Impact Polystyrene), or Polyvinyl chloride (PVC).
- FX armor may not be used for Level 3 approval.

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This Visual Guide has been reviewed by the detachment staff and the LMO team and is certified for use as a minimum approval guideline for GMLs. GMLs are free to approve this costume type.

- Any uncertainties or questionable aspects of the submitted costume should be brought to the appropriate DL/GML peer review section of the legion forum.

## Required Costume Components

The following costume components are present and appear as described below.



Helmet  
For 501st approval:

- Traps (trapezoids on dome of helmet) and tears (area beneath the corners of eye lenses) are grey.
- Rear traps and tears have vertical black lines.
- Lenses are a flat smoke or green sufficiently dark enough to obscure the costumer's eyes.
- The ear bars have three or four bumps and are painted grey, with a black outline. Painting the bumps with rank stripes (highlighted) in black is optional.

- Frown is painted black and does not leave the teeth area. Eight or six total teeth on the frown are cut out.
- Tube stripes are medium blue, should be 13 per side, but can be 9 and 16 per side with the curve bends extending backwards.
- Vocoder (vertically ribbed chin detail) is painted black.
- Aerators/Hovi mix tips (cylinders on either side of the vocoder) are black or painted black.
- Tears, traps, and tube stripes should be decals but can be hand painted, or decals that replicate hand painted.
- Mesh may be used behind the frown to obscure the face of the wearer.
- Note: The helmet is accurate in detail and proportion to official references.
  - ◆ Many commercially available helmets or those considered disproportionate in size or shape are ineligible.

For level two certification (if applicable):

- Ears shall have three screws used per side, one above and below the ear bar and one at the base of the helmet.
- Traps/tears and tube stripes shall be decals (with the correct ESB details), no hand-painting or decals that replicate hand painted.
- Traps/tears may be either ANH grey or a slightly bluer shade of ANH grey.
- Ear bars shall have four bumps only, not three.
- Correct 'Hovi mic' aerator tips.

For level three certification (if applicable):

- Ear bars shall have only two to three bumps painted in black (rank stripes).
- Neck trim shall be of an s-type profile rather than a u-type profile.



Neck Seal  
For 501st approval:

- Black with horizontal ribs, fitted to the wearer, and extending from the base of the neck to the top of the Adam's apple.



Shoulder Straps  
For 501st approval:

- These shall be securely mounted in front and may free float in back. They may be affixed with rivets, Velcro, or adhesive.

For level two certification (if applicable):

- No visible rivets are allowed.

For level three certification (if applicable):

- These shall be glued in front.
- These shall be affixed in the back (no snaps, rivets or brads shall be visible).
- The plastic shoulder straps need to be held down in the back via a white elastic band to the white fabric that connects/bridges the chest

and back piece.



Shoulder Armor  
For 501st approval:

- One on each shoulder.
- The shoulders are considered effectively symmetrical.
  - ◆ They may be worn interchangeably on the left and right shoulders.



Upper Arm Armor  
For 501st approval:

- Armor is fully closed.

For level two certification (if applicable):

- Armor is constructed using the butt joint and cover strip method.
  - ◆ Not by overlapping the pieces.



Forearm Armor  
For 501st approval:

- Forearms are fully closed.

For level two certification (if applicable):

- No return edge on the inside of the front of the forearm is allowed.
- Forearms are constructed using the butt joint and cover strip method. \*\*Not by overlapping the pieces.



Hand Plates  
For 501st approval:

- These shall be clam shell, or snowtrooper-style hand plates and not the trapezoidal design seen in A New Hope. The hand plates shall be mounted securely over the back of the glove.

For level two certification (if applicable):

- If rubber gloves are worn the hand plates are affixed via an elastic strap over the palm.
- If silk or satin gloves are worn, the hand plates have the correct visible stitching pattern using black cotton, with a five point/star pattern, equally spread out with 2 on each side and 1 in the middle front, and needs to be double stitched at each point.



Gloves  
For 501st approval:

- Black in color, made of either rubber, nomex, leather, or leather-like material, with no visible straps or logos/designs. The fingers are enclosed, non-textured.

For level two certification (if applicable):

- Gloves shall be black rubber or rubber-like chemical gloves or black silk or satin.



Chest Armor  
For 501st approval:

- Chest plate overlaps the abdominal plate.

For level two certification (if applicable):

- Chest and back shall be connected with a white fabric or preferably elastic strap at the shoulders.
- AM chest plate is replaced with a more screen accurate version.



Back Armor  
For 501st approval:

- Back plate contains a "O II" design.

For level two certification (if applicable):

- Back plate shall have no, or minimal overlap of the kidney plate.
- AM back plate is replaced with a more screen accurate version.



Under Suit  
For 501st approval:

- Black non-textured material, either one-piece or two-piece construction with no visible zippers or logos/designs.

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Abdomen Armor  
For 501st approval:

- The abdomen armor has a button area that matches the color pattern shown (3 blue + 6 grey); buttons are approximately 7/16" (11mm) in diameter.

For level two certification (if applicable):

- Any gap between the abdomen and kidney armor is no more than 1/2" (12.5mm) wide.
  - ◆ Any shims used to achieve this effect are of a similar material and color as the abdomen and kidney armor. Shims fit flush and seams are allowed.

For level three certification (if applicable):

- Ideally there no gap between the abdomen and kidney armor.
  - ◆ A single visible seam line is present.
- Three rivets, approximately 5/16"(8mm) diameter, are present on the left side of the abdomen armor.
  - ◆ Note: The original rivets used for the TK armor were bifurcated rivets or split rivets.
- Rivets are equally spaced along the depth of the armor and about 10mm from the edge.
- The heads are rounded or domed.
  - ◆ Note: Paperclip brads are not considered to have a domed head.
- Rivets are painted white.
- A single male snap on the top right corner of the ab plate is present.
- A single split rivet or brad is present on the lower tab of the abdomen armor.
  - ◆ Rivet does not need to be functional.
- Abdomen armor buttons are integrated and painted directly on the armor.
  - ◆ No separate buttons are allowed.



Kidney Armor  
For 501st approval:

- A separate kidney plate is present, split from the posterior armor.

For level two certification (if applicable):

For level three certification (if applicable):

- Squared cut-out sections at the lower left and right corners of the Kidney Armor.
  - ◆ The cut out is roughly 22 mm tall from the bottom and 22 mm in from the side.
- Three rivets, approximately 5/16"(8mm) diameter, are present on the left side of the kidney plate.
  - ◆ Note: The original rivets used for the TK armor were bifurcated rivets or split rivets.
- Rivets are equally spaced along the depth of the armor and about 10mm from the edge.
- The heads are rounded or domed.
  - ◆ Note: Paperclip brads are not considered to have a domed head.
- Rivets are painted white.



Posterior Armor  
For 501st approval:

- A separate rear armor piece is split from the Kidney Armor

For level two certification (if applicable):

- Two male snaps are present on the lower center tab of the Posterior Armor.
  - ◆ Snaps do not need to be functional.



Belt  
For 501st approval:

- Belt face is made of plastic (TK ammo belt).
- The soft belt proper is made of canvas, or material with a canvas covering. Size is 2.75" (70 mm) to 3.25" (83 mm) wide and not wider

- than the plastic portion of the belt. The color is be white to off-white.
- The drop boxes dangle from the sides of the front plastic belt (ammo belt) via white straps and are aligned under the plastic tabs of the ammo belt.

For level two certification (if applicable):

- There shall be three square buttons, one centered in the middle and one on each end of the plastic ammo belt.

For level three certification (if applicable):

- Drop boxes have full inner drop boxes to close the back.
  - ◆ Not flat covers.
- Drop boxes are vertically aligned with the end of the ammo belt with minimal gap between belt and box.
- The corners of the of the plastic ammo belt shall be trimmed at a 45 degree angle.



Thermal Detonator  
For 501st approval:

- (A.K.A. O2 canister) attaches to the center back of the belt.
- Detonator consists of an all grey cylinder, without silver stickers or silver paint.
  - ◆ The cylinder is between 2" (50mm) and 2.68" (68mm) in diameter with white end caps on each end.
- The white control panel pad faces upwards, with the controls/round washer style detail closest to the right end cap.
- The total length is approximately 7.50" (190.5mm).
- The thermal detonator is attached via metal or metallic-appearing clips, approximately 1" (25mm) wide.

For level two certification (if applicable):

- Thermal detonator belt clips are positioned with little to no gap between the clips and the end caps.



Thigh Armor  
For 501st approval:

- Thigh armor shall be closed in the back.
- The small ammo belt is installed on the bottom of the right thigh.

For level two certification (if applicable):

- Thigh ammo belt is attached to thigh with a solid head rivet or fastener in the upper corner and fastened to the lower thigh ridge.
  - ◆ The solid head rivet attachment is painted white.
  - ◆ Standard pop rivets are not allowed
- The bottom corners of the thigh ammo belt are rounded off.
- Thighs are constructed using the butt joint and cover strip method.
  - ◆ Overlap construction is not allowed.

Lower Legs  
For 501st approval:

- Greaves close in the back. The trapezoid knee plate (sniper knee plate) is affixed to the left greave and may have two visible brads or rivets securing it to the greave.





- The AM greaves (shins) shall be on the proper legs, with a new cover strip. The cover strip edge shall be facing the inside of the leg. Note: There is a manufacturer defect with the AM greaves (shins) that may cause you to wear the them improperly. Please see the Tutorial titled : "AM armor shins: the proper way to assemble and wear", on the [whitearmor.net](http://whitearmor.net)

For level two certification (if applicable):

- Sniper knee plate is aligned with the ridges on the shin.
- Sniper knee plate does not have visible rivets or fasteners attaching it to the shin.

For level three certification (if applicable):

- Lower legs are constructed using the butt joint and cover strip method.
  - ◆ Not by overlapping the pieces.



Boots

For 501st approval:

- Boots are above ankle height and made of white leather or leather-like material.
- Small U-shaped elastic sections on both sides of the ankle.
- Flat sole with a short heel.
- No buckles or laces.
- Jodhpur/ Chelsea-type boots or an equivalent style is acceptable.
  - ◆ Elvis or Mariachi boots are not allowed.

For level two certification (if applicable):

- There is no seam present on the front of the boot.
- Boots are lightly scuffed.



Holster

For 501st approval:

- Holster is worn on right side of belt. Holster will be made of completely black leather or leather-like material and be worn on the right and affixed via two black loops over the belt (no fasteners).

## Optional Accessories

Items below are optional costume accessories. These items are not required for approval, but if present appear as described below.



E-11 Blaster (ESB)

For 501st approval:

- Based on a real or replica Sterling sub-machine gun, scratch-built, or a modified commercial toy Stormtrooper blaster.

For level two certification (if applicable):



- Folding stock (does not need to function).
- No ammo counter shall be present.
- D-ring mounted on the rear.
- Sterling based blasters have the correct M-38 or M-19 style scope.
  - ◆ The M-19 scope is preferred.
- No power cylinders on the magazine housing.
- Scratch-built, resin cast, Hyperfirm rubber cast blasters shall have a total of 6 T-tracks on blaster (leaving the lowest row on the magazine housing side uncovered).
- If using the Hasbro E11 toy blaster, it is modified to have the correct number of T-tracks (6 total), with a lower row of open vent holes on the magazine housing side.
  - ◆ This is accomplished by covering the pre-existing rows of holes with T-tracks, then grinding off the lower integrated T-track on the magazine housing side, and drilling a new row of holes in its place.

For level three certification (if applicable):

- Hasbro blasters are not allowed, even conversions.



E-11 Blaster (promo)  
For 501st approval:

- Based on a real or replica Sterling sub-machine gun, scratch-built, or a modified commercial toy Stormtrooper blaster.

For level two certification (if applicable):

- Folding stock (does not need to function).
- No ammo counter shall be present.
- Correct style scope.
- No power cylinders on the magazine housing.
- Scratch-built, resin cast, Hyperfirm rubber cast blasters shall have a total of 6 T-tracks on blaster (leaving the lowest row on the magazine housing side uncovered).
- If using the Hasbro E11 toy blaster, it is modified to have the correct number of T-tracks (6 total), with a lower row of open vent holes on the magazine housing side.
  - ◆ This is accomplished by covering the pre-existing rows of holes with T-tracks, then grinding off the lower integrated T-track on the magazine housing side, and drilling a new row of holes in its place.
- Two greeblies on the left rear area.
- Three studs on the right rear area.
- Add two scope block greeblies.
- Remove front bayonet muzzle disk.
- Remove magazine housing parts.
- Remove D-Ring mount.
- Swoosh trim on right side above the pistol grip.

For level three certification (if applicable):

- Hasbro blasters are not allowed, even conversions.

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- This CRL is available as a PDF at [www.501st.com/databank/Costuming:TK\\_esb](http://www.501st.com/databank/Costuming:TK_esb)

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